

REMARKS

With the present Amendment, independent claim 24 is pending with claims 26 through 31 depending therefrom. Independent claim 35 is pending with claims 37 through 42 depending therefrom.

Claims 24 through 31 and 35 through 42 were rejected in the Office Action under § 103(a) in view of Quantrille '286 and Kobylyivker '005. The pending claims also stand rejected under § 103(a) in view the combination of Serbiak '232, Quantrille '286 and Kobylyivker '005. Applicants respectfully submit that all of the pending claims as amended and presented herein define over any combination of the cited references for at least the reasons set forth below.

As amended herein, the method of independent claim 24 calls for partially stretching the non-elastic film layer to render a partial degree of breathability to the film layer. The non-elastic neckable material is then attached to the partially stretched non-elastic film layer to form a laminate. This laminate is then stretched in a first dimension to neck the laminate in a dimension perpendicular to the first dimension and to stretch to the non-elastic film layer an additional amount to render a final degree of breathability to the film. In this manner, striated rigosities are set in the non-elastic film layer and remain set upon release of the stretching force to the laminate. The rigosities allow the laminate to extend and retract in the dimension perpendicular to the first dimension. This unique set of steps is not rendered obvious by Quantrille '286 in view of Kobylyivker '005 or any other cited reference.

Applicants acknowledge that it is well known in the art to stretch filled films to render the films microporous and breathable, and then to laminate such films to a

fibrous web to form a finished breathable laminate. However, even if such a stretched filled film was used as the extensible web 12 in the composite fabric 10 of Quantrille '286, such a combination is still not in accordance with the method of claim 24. As explained in the specification of the present application, it is known that stretching and orienting a filled film layer causes micropores to form in the film. However, longitudinal striated rigosities do not form in these conventional filled films when stretched. The film layers instead become physically thinner and may narrow slightly. As explained at page 7 of the present application, additional attempts to elongate the stretched and oriented filled film layer in the transverse direction would result in tearing of the film along the longitudinal microslits formed from the stretching and orienting procedure. The polymer used to make the film, the amount of filler, and how much the film was totally drawn affects how much the film can be elongated in the transverse direction before it splits. Thus, substituting a stretched and oriented filled film, wherein the film has been stretched to achieve a desired degree of breathability, as the extensible web 12 in the structure according to Quantrille '286 would not result in a useful product, and is not in accordance with the method of claim 24.

Claim 24 calls for the step of partially stretching the non-elastic film layer in a first step to render a partial degree of breathability to the layer. After this layer is laminated to the non-elastic neckable material, the laminate is then further stretched to such an extent that the non-elastic film layer achieves a final degree of breathability and striated rigosities are "set" in the non-elastic film layer. These rigosities remain in the film upon release of the stretching force to the laminate so that the laminate is extensible and retractable in the transverse direction perpendicular to the stretching direction of the

final laminate without affecting the breathability or integrity of the laminate. In the present invention, the final necking of the laminate to achieve a total draw that renders the film layer highly breathable after the film has been laminated to the non-elastic neckable material causes the neckable material to "bring" the non-elastic film layer with it, thereby forming the longitudinal striated rigosities in the film that allow the film layer to then subsequently extend and retract in the transverse direction. It is believed that the film increases in crystallinity during the laminate stretching/necking phase and becomes "set" in the narrowed necked configuration of the web with the striated rigosities. The striated rigosities thus hold the laminate and necked nonwoven material in the necked width.

Although the art may teach of the use of stretched filled films as layer in a laminated structure for any number of absorbent articles, the art does not teach or suggest of a desirability or benefits of only partially stretching a film so that an initial degree of breathability is achieved that is less than a final desired degree of breathability, laminating the partially stretched film to a non-elastic neckable material, and then stretching the laminated structure in a final necking phase to such an extent that the film achieves its final desired degree of breathability and the overall laminate is extensible and retractable in a transverse direction.

As described in the present application, the use of conventional stretched filled films in a necked laminate according to the invention would result in an undesirable product because any transverse direction extension of the laminate would cause tearing and possible failure of the film. The present inventors have developed a unique method for manufacturing a breathable laminate that incorporates a stretched filled film yet is

also extensible and retractable in a direction transverse to the stretched direction of the film. Absent knowledge of the present application and unique benefits and properties of the laminate described therein, one skilled in the art would not have been motivated to modify the fabric of Quantrille '286 to come within the scope of claim 24 as amended and presented herein.

Claim 24 also patentably distinguishes over the combination of Serbiak '232, Quantrille '286, and Kobylivker '005 for the essentially the reasons set forth above. The fact that stretched filled films are well known in the art, as well as a necked extensible laminate composite of a non-elastic web and a non-elastic film does not provide teaching or motivation to one skilled in the art to completely redesign the laminate structure of Serbiak '232 in accordance with claim 24. As noted by the Examiner, Serbiak '232 does not teach of necking a laminate whatsoever, but teaches to provide separate extensible materials to an elastic layer. The elastic layer is thus not in any way stretched or necked in the construction according to Serbiak '232. In fact, the composite structure according to Serbiak '232 could not be formed by a necked laminate because areas of the composite structure must be non-extensible, for example the area 37 overlying the absorbent body structure 36, as seen in Figs. 1 and 2 of the reference. Serbiak '232 teaches to provide a composite structure wherein extensible zones 30 are formed by attaching the separately extensible materials to the intermediate elastic layer 28. Non-extensible zones are defined in areas where the cover 24 or base layer 22 are unattached to the elastic layer 28. The construction of Serbiak '232 is not merely a "preference" as suggested by the Examiner, but is necessary to the construction of the composite structure. A necked laminate of non-

elastic film and non-elastic neckable materials is fundamentally different from the composite structure of Serbiak '232 that calls for extensible materials, such as separately necked materials, to be subsequently attached to an elastic layer.

Thus, any motivation or suggestion to further reconfigure the process and composite structure of Serbiak '232 to form a laminate of a partially stretched film and neckable material, and then to further stretch the laminate in a final drawing/necking phase is completely missing and, in fact, would not be useful in the structure described in Serbiak '232. As to the claimed process of initial stretching of the film, lamination of the film to the neckable material, and final stretching of the laminated material, the distinctions discussed above with respect to the base combination of Quantrille '286 and Kobylivker '005 are incorporated herein.

Accordingly, applicants respectfully submit that independent claim 24 is allowable over the applied art. Claims 26 through 31 only further patentably distinguish the unique combination of steps set forth in claim 24 and are thus also allowable for at least the reasons claim 24 is allowable.

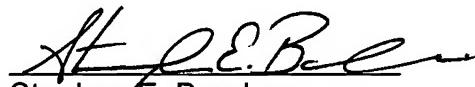
Independent claim 25 is amended herein to further define the steps of partially stretching the non-elastic film layer in an initial film stretching phase such that the draw of the film is less than 4.0 X so as to render the film layer partially breathable. The partially stretched film is then attached to the non-elastic neckable material to form a laminate. This laminate is then stretched in a longitudinal direction in a final draw/necking phase wherein the laminate draw is between about 1.2 X to about 1.6 X to neck the laminate a transverse direction and to stretch the non-elastic film layer to its final degree of breathability. The final necking phase causes striated rigosities to be set

in the non-elastic film layer such that the resulting laminate is extensible and retractable in the transverse direction. The analysis set forth above with respect to claim 24 applies to claim 35. Accordingly, it is respectfully submitted that claim 35 patentably defines over the applied references and is allowable. Claims 37 through 42 only further patentably define the method of claim 35 and are thus allowable for at least the reasons claim 35 is allowable.

With the present Amendment, applicants respectfully submit that all pending claims are allowable over the applied art, and that the application is in condition for allowance. Favorable action thereon is respectfully requested. The Examiner is encouraged to contact the undersigned at his convenience should he have any questions regarding this matter or to resolve any remaining issues.

Respectfully submitted,

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